



SEQUENCE LISTING

<110> Bayer HealthCare AG
Greif, Gisela
Hosse, Ralf
Krucken, Jurgen
Wunderlich, Frank

<120> Use of Novel Eimeria Gene and Corresponding Protein

<130> LeA 36 695

<140> US 10/562,324

<141> 2005-12-23

<150> PCT/EP2004/007080

<151> 2004-06-30

<150> DE10330235.2

<151> 2003-07-04

<160> 24

<170> PatentIn version 3.3

<210> 1

<211> 1186

<212> DNA

<213> Eimeria tenella

<220>

<221> CDS

<222> (83)..(679)

<400> 1
caggacccca aaataaaatc aaaggctatc acactatttt acttcttaac cgtttactga 60
ggctacaaga acaagtttga ag atg agg act atc cta gcc acc cta gtc ggt 112
Met Arg Thr Ile Leu Ala Thr Leu Val Gly
1 5 10
ttc aca gcc tgc gca gcc gtt gct gca gac gga gca cct gag tat cct 160
Phe Thr Ala Cys Ala Ala Val Ala Ala Asp Gly Ala Pro Glu Tyr Pro
15 20 25
tct cag ctt gca gtt gaa atc gat cca gaa gcg att att gcg atc cag 208
Ser Gln Leu Ala Val Glu Ile Asp Pro Glu Ala Ile Ile Ala Ile Gln
30 35 40
caa gat gca aac gcc gac cca cgt ctc ttt ttc cca ctg agc ggg ctt 256
Gln Asp Ala Asn Ala Asp Pro Arg Leu Phe Phe Pro Leu Ser Gly Leu
45 50 55
gtc tcc gcc aaa ctt gcc aaa gtc ttt caa ccc aac ata tac cca acc 304
Val Ser Ala Lys Leu Ala Lys Val Phe Gln Pro Asn Ile Tyr Pro Thr
60 65 70
cct cct agt ccc cag aca act tac cac ttt cac ctc cat cct cat ccc 352
Pro Pro Ser Pro Gln Thr Thr Tyr His Phe His Leu His Pro His Pro
75 80 85 90
cat tat ccg cat cct cag cca agt tat cct cat cct caa ccc cat cat 400
His Tyr Pro His Pro Gln Pro Ser Tyr Pro His Pro Gln Pro His His
95 100 105
cct cat cct cat cct tat cat cct cat cct cat ccc cat cat cct cat 448
Pro His Pro His Pro Tyr His Pro His Pro His Pro His His Pro His
110 115 120

cct cat ccc cat caa cat cct cat cgt cat ccc gac cat cat ccc cac Pro His Pro His Gln His Pro His Arg His Pro Asp His His Pro His	496
125 130 135	
cat cat cct cac cat cat cat cat gaa cat aat gtt cat gtg cct caa His His Pro His His His His His Glu His Asn Val His Val Pro Gln	544
140 145 150	
cat cag cac gct caa cac aac ggc cac cag aac aac ggt ggc cca gct His Gln His Ala Gln His Asn Gly His Gln Asn Asn Gly Gly Pro Ala	592
155 160 165 170	
cat tat cac cat gac tac cat ttt gcg cat cct cat caa gag aac cag His Tyr His His Asp Tyr His Phe Ala His Pro His Gln Glu Asn Gln	640
175 180 185	
cat cac cgc gag gaa gag cag ctt acc gac atc aac taa gctattgggtc His His Arg Glu Glu Glu Gln Leu Thr Asp Ile Asn	689
190 195	
gggaattaag gtgcttagtc tcagtagtca gtacagtact aggctacgtc tgagatcttc	749
atggcaaaga ggtaccagcc accaagctga ctcggctatg ttttattaga caaatttaaa	809
tttaaagggt cccagtttca gtctctgcag gtctgcccct gaaagcacga gaggggccta	869
aagggtgatt ggagctgcaa atacagctgc aaatgcagct gcaaagtgcc gcttcaaaaa	929
agggacaggc ttcccgccaa aatTTTTTgga tcatacctat caatgcttcg agaaaacata	989
gaaaacaaaa gcactgaaga acgttcatag tcggtagttt taggggcatg ccgtgtgcta	1049
aaatcccatc gaaccttcag gtacacctga tcgttacgaa gtacacacca ccggtcactc	1109
tcaacgcgca ccactagagc gagagctgct tcagggatgc agcgagatgt cgactcagag	1169
gtcctacatt aaagga	1186

<210> 2
 <211> 198
 <212> PRT
 <213> Eimeria tenella

<400> 2

Met Arg Thr Ile Leu Ala Thr Leu Val Gly Phe Thr Ala Cys Ala Ala
 1 5 10 15

Val Ala Ala Asp Gly Ala Pro Glu Tyr Pro Ser Gln Leu Ala Val Glu
 20 25 30

Ile Asp Pro Glu Ala Ile Ile Ala Ile Gln Gln Asp Ala Asn Ala Asp
 35 40 45

Pro Arg Leu Phe Phe Pro Leu Ser Gly Leu Val Ser Ala Lys Leu Ala
 50 55 60

Lys Val Phe Gln Pro Asn Ile Tyr Pro Thr Pro Pro Ser Pro Gln Thr
 65 70 75 80

Thr Tyr His Phe His Leu His Pro His Pro His Tyr Pro His Pro Gln
 85 90 95

Pro Ser Tyr Pro His Pro Gln Pro His His Pro His Pro His Pro Tyr
100 105 110

His Pro His Pro His Pro His His Pro His Pro His Pro His Gln His
115 120 125

Pro His Arg His Pro Asp His His Pro His His His Pro His His His
130 135 140

His His Glu His Asn Val His Val Pro Gln His Gln His Ala Gln His
145 150 155 160

Asn Gly His Gln Asn Asn Gly Gly Pro Ala His Tyr His His Asp Tyr
165 170 175

His Phe Ala His Pro His Gln Glu Asn Gln His His Arg Glu Glu Glu
180 185 190

Gln Leu Thr Asp Ile Asn
195

<210> 3
<211> 597
<212> DNA
<213> Eimeria tenella

<400> 3
atgaggacta tcctagccac cctagtcggt ttcacagcct gcgcagccgt tgctgcagac 60
ggagcacctg agtattcctt tcagcttgca gttgaaatcg atccagaagc gattattgcg 120
atccagcaag atgcaaagc cgaccacgt ctctttttcc cactgagcgg gcttgtctcc 180
gccaaacttg ccaaagtctt tcaacccaac atatacccaa cccctcctag tccccagaca 240
acttaccact ttcacctcca tcctcatccc cattatccgc atcctcagcc aagttatcct 300
catcctcaac cccatcatcc tcctcctcat ccttatcatc ctcatcctca tccccatcat 360
cctcatcctc atccccatca acatcctcat cgtcatcccg accatcatcc ccaccatcat 420
cctcaccatc atcatcatga acataatggt catgtgcctc aacatcagca cgctcaacac 480
aacggccacc agaacaacgg tggcccagct cattatcacc atgactacca ttttgcgcat 540
cctcatcaag agaaccagca tcaccgcgag gaagagcagc ttaccgacat caactaa 597

<210> 4
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer A17-22-up

<400> 4
tcctcatcct tatcatcctc atcct

25

<210> 5
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer A17-112-lo

 <400> 5
 gtggggatga tggtcggg 18

<210> 6
 <211> 33
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer A17-f-length-64-up

 <400> 6
 caggacccca aaataaaatc aaaggctatc aca 33

<210> 7
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer A17-f-length-1176-lo

 <400> 7
 tgaccggtgg tgtgtacttc gtaac 25

<210> 8
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer EtACTIN-up

 <400> 8
 ctgtgagaag aaccgggtgc tcttc 25

<210> 9
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer EtACTIN-lo

 <400> 9
 cgtgcgaaaa tgccggacga agag 24

<210> 10
 <211> 32
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer A17-max-90-up

 <400> 10

tgaggactat cctagccacc ctagtcgggtt tc 32

<210> 11
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer A17-max-150-up

<400> 11
gagcacctga gtatccttct cagcttgag tt 32

<210> 12
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer A17-max-533-lo

<400> 12
tatgttcag atgatgatgg tgaggatgat gg 32

<210> 13
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer A17-max-631-lo

<400> 13
aggatgcga aaatggtagt catggtgata at 32

<210> 14
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer pG8SAET-up

<400> 14
taggtgtagg tattgcatct gtaactt 27

<210> 15
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer pG8SAET-lo

<400> 15
cgatatattc ggctcgctgag gcttgca 27

<210> 16
<211> 27
<212> DNA
<213> Artificial Sequence

<220>

<223> Primer pG8SAET-seq-up-140
 <400> 16
 atgatgactt tacaatata tacaggg 27

 <210> 17
 <211> 32
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer A17-sequent-27-up
 <400> 17
 cgaggaagag cagcttaccg acatcaacta ag 32

 <210> 18
 <211> 32
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer A17-sequent-44-up
 <400> 18
 ccgacatcaa ctaagctatt ggctcggaat ta 32

 <210> 19
 <211> 32
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer A17-sequent-385-lo
 <400> 19
 atgaggataa tttggctgag gatgcggata at 32

 <210> 20
 <211> 32
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer A17-sequent-351-lo
 <400> 20
 ggatgaggat ggaggtgaaa gtggttaagtt gt 32

 <210> 21
 <211> 17
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer M13 reverse
 <400> 21
 cgagaaacag ctatgac 17

 <210> 22
 <211> 16
 <212> DNA

<213> Artificial Sequence

<220>

<223> Primer M13 forward

<400> 22

gtaaaacgac ggccag

16

<210> 23

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer T7-Promotor

<400> 23

attatgctga gtgatatccc

20

<210> 24

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer BGH reverse

<400> 24

tagaaggcac agtcgagg

18